Acknowledgement of Indigenous Peoples and Traditional Territories:
York University recognizes that many Indigenous nations have longstanding relationships with the territories upon which our campuses are located that precede the establishment of York University. We acknowledge our presence on the traditional territories of the Mississaugas of Credit First Nation, the Huron-Wendat, the Haudenosaunee Confederacy and the Métis Nation of Ontario.

YORK UNIVERSITY

FACULTY OF HEALTH

SCHOOL OF KINESIOLOGY AND HEALTH SCIENCE

HH KINE 3020 3.0

SKILLED PERFORMANCE AND MOTOR LEARNING

Fall 2020

*** Please note that this is a course that depends on remote teaching and learning. There will be no in-class interactions or activities on campus. ***

This course is an introduction to the psychological principles and underlying neural mechanisms of skilled performance and motor control. In addition, experimental methods employed in the study of motor control will be demonstrated in the laboratory. Topics include the role of attention, information processing and feedback in controlling performance, as well as the contribution of the central nervous system in voluntary motor performance and motor learning.

Take Care of Yourself:

We are all dealing with a tremendous amount of stress, anxiety, fear, and uncertainty as a consequence of the COVID-19 pandemic. Please be kind and gentle with yourselves and others during this difficult period of time. There are a number of online free resources available to help support you. If you need help, the following list of websites (this is not an exhaustive list), may be a good place for you to start:

https://good2talk.ca/
https://counselling.students.yorku.ca/
https://coronavirus.info.yorku.ca/
https://yorkinternational.yorku.ca/

Prerequisites: HH KINE 2050 3.0 [or equivalent "Statistics" course]; and HH PSYC 1010 6.0

Course Director: Professor **Merv Mosher**
359 Stong College
mmosher@yorku.ca

Virtual Office Hours:

Regular online office-hours will be held throughout the term. The exact schedule will be posted on the course eClass site (formerly Moodle). If needed, a virtual office-hour appointment can be arranged.

Email correspondence:

Email communication should be reserved primarily for issues that need to be resolved immediately. Questions that arise related to course content should be posted on the eClass site (formerly Moodle), Discussion Boards or discussed during the regularly scheduled virtual office hours.

Please ensure that email messages are professional, clear, and coherent. Assume that your email will be the factor determining whether you are accepted into a professional program or hired at your dream job. Avoid text messaging terms, inappropriate language, emoticons, and poor spelling, punctuation, and grammar. I can only respond to emails that I understand. I generally review and respond to course-related student emails quite promptly with the exception of emails sent on weekends. These will likely be answered on the first business day of the following week.

Course Website: https://eclass.yorku.ca/eclass/course/view.php?id=12890

Professor's web site: http://mmosher.info.yorku.ca/

Course text:

Course Kit: Skilled Performance and Motor Learning, York University, 2020. Please see the York University Bookstore webpage (https://bookstore.yorku.ca) for ordering books and for the information about free shipping of course kits to students with a Canadian address.

Course Materials Copyright Information

These course materials are designed for use as part of this course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. Intellectual Property Rights Statement.

Technical requirements for taking the course:

Since the entire course will be delivered remotely, two platforms will be used, (i.e., eClass (formerly Moodle), and Zoom), through which students will interact with the course materials, the course director, Teaching Assistants, as well as with one another. Therefore, a computer or smart device with a camera and microphone is required to complete the course.

Please review this syllabus carefully to determine how the course content will be delivered, how office hours will be conducted and how assignments will be submitted.

Students must make every effort to arrange adequate internet connection, especially for tests and exams. If a student has any concerns about their internet connection, they should seek all available options for writing their exams/tests/quizzes in a location with a stable internet connection. In the event that a student is not confident they can access a reliable internet connection, they should communicate their concerns to the Course Director well in advance of the quiz/test/exam.

Students should note the following:
- Zoom is hosted on servers in the U.S.A. This includes recordings done through Zoom.
- If you have privacy concerns about your data, provide only your first name or a nickname when you join a session.
- The system is configured in a way that all participants are automatically notified when a session is being recorded. In other words, a session cannot be recorded without you knowing about it.

Technology requirements and FAQs for Moodle can be found here

Useful links describing computing information, resources and help for students:

Student Guide to eClass	https://lthelp.yorku.ca/student-guide-to-moodle
Computing for Students Website	https://student.computing.yorku.ca/
Student Guide to eLearning at York University	http://elearning-guide.apps01.yorku.ca/
Learning Skills Services	https://lss.info.yorku.ca/online-learning/
Zoom@YorkU User Reference Guide	http://staff.computing.yorku.ca/wp-content/uploads/sites/3/2012/02/Zoom@YorkU-User-Reference-Guide.pdf
Zoom@YorkU Best Practices	https://staff.computing.yorku.ca/wp-content/uploads/sites/3/2020/03/Zoom@YorkU-Best-Practicesv2.pdf

Students are responsible for being actively involved in the course, and for checking eClass (formerly Moodle), regularly and frequently to ensure you have the latest information about the course. “I did not know because I was not online” or “because I did not check eClass” are not excuses that will be accepted under any circumstances for the course.

Organization of the course:

KINE 3020 is being delivered remotely via eClass (formerly Moodle), and Zoom; **there will be no in-class interactions or activities on campus**. KINE 3020 involves a blend of asynchronous (participate on your own and at times you choose) and synchronous (students are expected to attend and participate at a specific time in live virtual/online sessions) modes of teaching.

Lectures: (Asynchronous mode)

Course lectures are scheduled as follows: Section A - M, W, at 1:30 pm; and Section B - M, W, at 2:30 pm. The 12-weeks of lecture material will be available on eClass (formerly Moodle), in the form of pre-recorded videos which will be posted at the beginning of each week. You can watch the recordings at the scheduled lecture time or any other time you choose. This is referred to as asynchronous delivery. It is imperative that you watch the lecture material during the week the

lecture is posted if you want to be successful in the course.

Laboratories: (Synchronous mode)

Each week, commencing September 21st, you will meet via Zoom with your Teaching Assistant, during the scheduled lab time in which you enrolled. This is the synchronous portion of the course and **requires that you are available at the same time each week to meet with your Teaching Assistant**. The Teaching Assistant may record the synchronous Zoom lab-sessions to assist with record keeping. Students are NOT granted permission to record Zoom sessions.

Each week, before beginning the lab, you should read the lab and complete a pre-lab assignment (quiz on eClass (formerly Moodle), which is to be completed prior to the start of the weekly labs.

It is during the 2-hour lab time that you will conduct a short experiment, collect and analyse the data and then begin your weekly lab assignment. Your weekly lab assignment is to be submitted (as a PDF file) to via eClass (formerly Moodle), to your TA, prior to the beginning of the following week's lab. Students must participate in the data collection portion of the lab in order to be able to submit the weekly lab assignment. **Lab assignments that are submitted late will not be marked**.

The following statement MUST be included with each lab assignment that is submitted:
"I confirm that the assignment I have submitted has been done independently and is my own work. I am aware of York University's policies about plagiarism and the penalties for plagiarism."

*Labs commence the week of September 21, 2020.

Weekly Readings: Are posted on eClass (formerly Moodle).

Course Evaluation: A simple way to explain the course evaluation is as follows: The Final Exam will be worth 100% of your mark unless you complete other components of the course. You do not lose marks if work is not attempted/completed. ***The percentage allocated for any course-work item that is not attempted/completed will remain as part of the weight of the final exam*.** Each item of course-work a student completes reduces the weighting of the Final Exam as shown below.

Quiz 0	0%	Based upon the Course Syllabus – you must complete this with a score of 100% before you can attempt the Weekly Quizzes and mid-term exams!
Lab Assignments	20%	Weekly assignments based on labs. (5% weekly Pre-lab Assignment plus 15% weekly Lab Assignment.)
Reading Quizzes	12%	Weekly eClass quizzes based on the weekly Readings. (10 questions in 10 minutes)
Mid-term exam	28%	Scheduled ***Oct. 26***, during lecture time. Section A: 1:30 pm EDT Section B: 2:30 pm EDT
Final exam	40% - 100%	Scheduled during December exam period.

To preserve the academic integrity of this course, all exams/tests/quizzes completed on eClass, will utilize the **sequential** method of questioning. This means questions are presented one-at-a-time. Once a student moves on to the next question that is considered the final answer. It is not possible to return to a question to review it. Please ensure that you have selected an answer before you move on to the next question. If you don't know the correct answer take a guess since there is no penalty for wrong answers.

Exams/Tests: (Synchronous mode)

The mid-term test and the final exam **MUST** be written at the date and time noted below. Students must make themselves available at the time the section in which they are enrolled, (Section A or Section B), is writing the test/exam (mid-terms and final). All times noted are local Toronto times. The mid-term test and the final exam are closed book exams which means no external aids (notes, books, calculators, or other reference materials) are permitted.

* * The mid-term tests and the final exam covers material from the lectures, readings and labs.

Students, who do not write the Mid-term exam, waive the right to receive "a specific percentage of graded feedback" prior to the drop date for the Fall term.

In the event a mid-term exam is missed the percentage allocated to the exam will be added to the final. There are no make-up exams in the course.

A student who misses the final exam will only be allowed to write a deferred final exam if the student submits the following two, completed forms: 1) "Attending Physician's Statement", available online from the Registrar's Office, showing a physical incapability of writing the final exam, **dated the day of the final exam or earlier** and, 2) Deferred Standing Agreement. These two forms should be submitted to the Course Director immediately after the final exam has been written.

Note: The format of the deferred final exam will not likely be the same as the regularly scheduled final exam.

Weekly eClass Quizzes based on the Readings: (Asynchronous mode)

The online quizzes may be written at any time during the week that is convenient for students. However, please note that if technical difficulties are encountered during the last 2 hours of the weekly quiz, no remedial action will be possible. In other words, don't wait until the last 2 hours to complete the weekly quizzes. Weekly Reading quizzes are open book quizzes which means you may refer to notes, summaries or the textbook. However, it is very easy to run out of time on an open book quiz. Keep in mind that students who place too much emphasis on their reference materials often underestimate how long it will take them to locate the information in their reference materials. It is important that students do the Weekly Reading prior to starting the quiz and only rely very minimally on reference materials.

** An appeal against any grade assigned to an item of course work must be made in writing to the course director within 7 days of the graded work being made available to the class. The result of an appeal may cause the grade to increase, decrease or remain the same.

The official record of grades in the course will be kept by the Course Director on a spreadsheet and uploaded to eClass as the course progresses. Marks will be posted on eClass under the topic heading of Grades. These will be updated as the course progresses. The eClass gradebook is not the official record of grades.

Final course letter grades may be adjusted to conform to Program or Faculty grades distribution profiles.

Although numerical marks are assigned to each piece of work in this course there should be no assumption that a total number of marks translates directly to a letter grade. Letter grades will be determined by the descriptions in the York University Undergraduate Calendar.

Academic Honesty And Integrity:

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's Academic Integrity module at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the Senate Policy on Academic Honesty.

To promote academic integrity in this course, students may be required to submit their written assignments to Turnitin (via eClass) for a review of textual similarity and the detection of possible plagiarism. In so doing, students will allow their material to be included as source documents in the Turnitin.com reference database, where they will be used only for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin service are described on the Turnitin.com website.

The following statement MUST be included with each lab assignment that is submitted:
"I confirm that the assignment I have submitted has been done independently and is my own work. I am aware of York University's policies about plagiarism and the penalties for plagiarism."

Test Banks
The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as "Cheating in an attempt to gain an improper advantage in an academic evaluation" (article 2.1.1 from the Senate Policy) and/or "encouraging, enabling or causing others" (article 2.1.10 from the Senate Policy) to cheat.

Eproctoring:

The instructor may use an online proctoring service to deliver the mid-term and final exams, which are administered through the Learning Management System (e.g. eClass). Students are required to have access to minimum technology requirements to complete examinations. If an online proctoring service is used, students will need to become familiar with it at least five days before exam(s). For technology requirements, Frequently Asked Questions (FAQs) and details about the online proctoring service visit – [https://registrar.yorku.ca/online-exams]. Students are required to share any technological (IT) accommodation needs with the instructor as soon as they are able.

Electronic Devices During a Test/Examination

Electronic mobile devices other than the one computer or tablet being used to write the test/exam are not allowed during a test or examination. Students are required to turn off and secure all electronic communication devices while a test/exam is in progress. Any student observed using more than one electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of Academic Honesty.

Drop Dates:

The last day to drop a Fall term course without receiving a grade is: **Nov. 6, 2020**.

The Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript), is **Nov. 7 - Dec. 8, 2020.**

Recorded Lectures:

Please note the York University policy regarding this technology.

The York University Student Code of Conduct specifically prohibits theft of intellectual property, which includes recording a course director's lecture without his/her permission or taking lecture material provided online, modifying it, and/or using it for your own personal use or gain. The material provided is only to be used for your personal study when you take the course for which it was created. Use in any other way will result, at the minimum, in sanctions in accordance with the York Code and, at the maximum, will be breaking federal, provincial or municipal laws and will be acted on accordingly.

Important Information For Students:

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy website.

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Policy on Free Speech:

York University reaffirms its commitment to provide an environment conducive to freedom of enquiry and expression where all members of the community may learn, teach, work and live, free from prejudice, inequality and discrimination based on race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, religion, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability.

Disruptive and/or Harassing Behaviour in Academic Situations Policy:

York is committed to policies that support the teaching and learning of controversial subject matter. Students and instructors are, however, expected to maintain a teaching and learning environment that is physically safe and conducive to effective teaching and learning for all concerned, and to be civil and respectful at all times within the learning environment, including within classrooms, laboratories, libraries, study halls and other places where academic activities are conducted and in areas proximate to those where academic activities are taking place.

Course Learning Expectations:

After completion of KINE 3020 3.0 [Skilled Performance and Motor Learning], students will be able to:

a. define skilled performance.
b. describe the basic components of the human nervous system.
c. compare and contrast different neural components of the human nervous system.
d. describe how the nervous system controls muscles and monitors body and limb positions.
e. describe how the brain utilizes visual information to control skilled movement.
f. describe how various structures of the brain control human movement.
g. identify different types of memory involved in learning.
h. describe the connotations associated with skilled behaviour.
i. compare and contrast the common motor skill classification systems.
j. describe methods of assessing the production and outcome of motor skills.
k. describe characteristics of learners as they progress through stages of learning.
l. construct a model of information processing used by skilled performers.
m. summarize the differences in processing abilities between expert and novice performers.

School of Kinesiology and Health Science Undergraduate Degree Level Expectations (UUDLES)

Depth and Breadth of Knowledge

- Demonstrate knowledge of the terminology and nomenclature in Kinesiology and Health Science.
- Critically reflect on physical activity and health from individual to societal and local to global contexts.
- Integrate and critically analyze the bio-science, behavioural, and sociocultural aspects of physical activity and health.

- Critically evaluate and discuss current issues relating to Kinesiology and Health Science.
- Demonstrate a breadth and depth of knowledge in Kinesiology and Health Science in one or more specialized areas.

Knowledge of Methodologies for Inquiry
- Describe the process of research that is used to develop knowledge in the field of Kinesiology and Health Science.
- Apply research methods to kinesiology and human health topics and solve problems using their knowledge of research methods in the discipline.
- Evaluate information about physical activity and human health that is disseminated via popular media and discipline related research journals.

Application of Knowledge
- Apply multi-disciplinary knowledge of physical activity and health to life situations.
- Use knowledge and skills to advocate for the fundamentals of physical activity and health from general to specific situations.
- Apply subject-based theories, concepts or principles to solve problems.

Communication Skills
- Access Kinesiology and Health Science information from a variety of sources.
- Use appropriate academic terminology and notation when preparing and presenting information.
- Present ideas and arguments in a well-structured and coherent manner using appropriate communications formats.

Awareness of Limits of Knowledge
- Understand and appreciate the dynamic nature of information in Kinesiology and Health Science.
- Be aware of the limits in knowledge and methodologies when analyzing, evaluating, interpreting and disseminating information.

Autonomy and Professional Capacity
- Be able to identify areas for personal and professional development.
- Be able to think independently, problem solve and set tasks.
- Have developed mutually beneficial peer relationships for the purposes of mentoring and networking.

KINE 3020 3.0 Skilled Performance and Motor Learning – Fall 2020

Lecture Topics and corresponding dates are Approximate

Week Beginning	Monday	Wednesday	Reading	Laboratory
September 7	Labour Day **University closed No Classes**	Introductory class – course syllabus	See Moodle	Labs in this course start the week of September 21.
September 14	Introduction to Skilled Performance & Motor Learning	Intro' to the Human Brain & Central Nervous System	See Moodle	Labs in this course start the week of September 21.
September 21	The Cerebrum	Transmission of Information	See Moodle	Lab 1 RT / MT Brain Intro
September 28	Skilled Performance & The Information Processing Model	Measuring Performance	See Moodle	Lab 2 Fatal Vision
October 5	Information Processing & Selective Attention	Selective Attention - Visual & Auditory	See Moodle	Lab 3 Speed / Accuracy
October 12	**[Fall Reading Week <u>No lecture</u>]**	**[Fall Reading Week <u>No lecture</u>]**	Review previous readings	No labs this week
October 19	Perception – Visual	Perception - Proprioception & Vestibular System	See Moodle	Lab 4 Measures of Error
October 26	**1st Midterm**	Sensory Processing	See Moodle	Lab 5 Sensorimotor integration and mental imagery
November 2	Perception - Behavioural Aspects 1	Perception - Behavioural Aspects 2	See Moodle	Lab 6 Perception – Crossman's CF
November 9	Neurological Aspects of Decision Making	Behavioural Aspects of Decision Making	See Moodle	Lab 7 Decision - Hick-Hyman
November 16	Neurological Aspects of the Effector Stage	Motor Control & Basal Ganglia	See Moodle	Lab 8 Central Processing
November 23	Motor Control & Cerebellum	Information Transmission to Muscles	See Moodle	Lab 9 Effector - Fitts Law
November 30	Effector Control of Movement	Motor Programs	See Moodle	Lab 10 Mirror Tracing
December 7	Neuroplasticity, Learning & Practice [last class]	Final Exam period begins	Review Readings	No labs
December	**<u>Fall Exam period</u>** Dec. 9 – 23	**<u>Fall Exam period</u>** Dec. 9 – 23	**<u>Exam period</u>** Dec. 9 –23	**<u>Fall Exam period</u>** Dec. 9 – 23